

**ECOLOGY AND ENVIRONMENT, INC.  
NATIONAL DIOXIN STUDY**

ECOLOGY AND ENVIRONMENT, INC.

MEMORANDUM

Reviewed by 6AW-SC  
date \_\_\_\_\_

TO: Keith Bradley, RPO

FROM: Tom Smith, FIT Geologist *TWS*

THRU: K.H. Malone, Jr., RPM *KHM*

DATE: February 12, 1985

SUBJ: Dioxin Sampling, Vertac Chemical, West Helena, Arkansas (AR361)  
TDD #R-6-8411-15

On December 4, 1984, the FIT collected 43 samples from 43 locations at the Vertac Chemical site, West Helena, Arkansas, for dioxin analysis. The endeavor was part of the National Dioxin Study and represented a Tier 6 inspection.

A combined random/direct sampling approach was applied during this inspection. The direct approach was utilized along the northwestern boundary to quantify any dioxin residues which may have remained atop the inactive, covered surface impoundments (see attached map). A random approach was used throughout the remainder of the unpaved portions of the site.

A grid network was devised for the Vertac Site (see attached grid map). Grids 1-18, which are within the inactive surface impoundment area, were sampled by the direct method. Grids 19-159 were sampled by a random selection scheme as derived from a pocket calculator. Each sample was collected from the mid-point of the selected grid and followed the protocols described on pages 38-40 of the Final Draft Report: Sampling Guidance Manual For The National Dioxin Study, July 1984. The direct approach yielded 17 samples from 18 grids (grid 13 was inadvertently not sampled) and the random method yielded 26 samples from 141 grids (see attached sample location map).

Analytical data generated by this inspection indicated that no TCDD was present in any of the samples collected at the Vertac West Helena facility.

The FIT recommends that no further National Dioxin Study activity be conducted at this site.